R&S®HL040E LOG-PERIODIC BROADBAND ANTENNA

400 MHz to 6 GHz

For broadband transmission and reception under open-field and laboratory conditions



The linearly polarized R&S®HL040E log-periodic broadband antenna provides broadband transmission and reception in the frequency range from 400 MHz to 6 GHz.

Precise construction and optionally available individual calibration make the antenna suitable for field strength and EMI measurements.

Power rating and matching (VSWR) allow its use in EMS measurements where field strengths of 10 V/m or higher are required.

Key facts

- ▶ Wide frequency range
- ▶ Suitable for susceptibility and emission measurements
- ► Stable radiation patterns over frequency range ensure optimum illumination of EUT
- ► Low cross-polarization
- ► Compact size, low weight
- ► Ease of handling
- ► Sturdy design
- ► Individual calibrations in line with ANSI C63.5 and CISPR 16-1-6
- ► Accredited calibration available on request

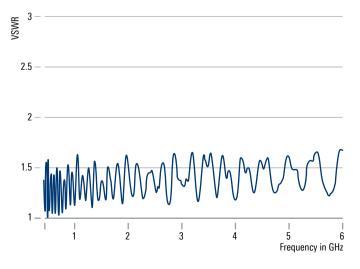




Specifications		
Frequency range		400 MHz to 6 GHz
Polarization		linear
Nominal impedance		50 Ω
VSWR		< 2.0
Gain		5.5 dBi (typ.)
Cross-polarization		-25 dB (typ.)
Front-to-back-ratio	400 MHz to 4.5 GHz	> 20 dB
	4.5 GHz to 6 GHz	> 15 dB
Maximum input power (at +40°C)	400 MHz	100 W (CW)
	1 GHz	90 W (CW)
	3 GHz	50 W (CW)
	6 GHz	35 W (CW)
RF connector		N female
MTBF		> 100 000 h
Operating temperature range		-40°C to +70°C
Protection class		IP55
Maximum wind speed	without ice deposit	275 km/h
Dimensions	$W \times H \times L$	approx. $0.43 \text{ m} \times 0.13 \text{ m} \times 0.55 \text{ m}$ (17 in \times 5 in \times 22 in)
Weight		approx. 2.5 kg (6 lb)

Ordering information	Туре	Order No.
Log-periodic broadband antenna, without calibration	R&S®HL040E	4099.8004.02
Recommended extras		
Wooden tripod	R&S®HZ-1	0837.2310.02
Adapter for R&S®HZ-1	R&S°HL025Z1	4053.4006.03

Typical VSWR



Typical antenna factor

